# THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

TEMPLE CONSTRUCTION DEPARTMENT

Special Projects Division Joseph Smith Memorial Building Eighth Floor 15 East South Temple Street Salt Lake City, Utah 84150-6330

August 20, 1999



Mr. D. Wayne Headberg
Permits Supervisor
Minerals Reclamation Program
Division of Oil, Gas and Mining
Department of Natural Resources
State of Utah
1594 West North Temple St., Suite 1210
SLC, Utah 84114-5801

Re: S/035/017: Little Cottonwood Granite Extraction Project - LDS Church Annual Report of Mining Operations (Form MR-AR) Supplement al Information Request dated 9/2/99

I apologize for the dely in responding to your earlier request of July 16, 1999. There was a misunderstanding between my civil engineering consultant and myself as to our response to your request. I am sorry. In response to your recent request by letter dated September 2, 1999, please find the following items enclosed:

- Updated extraction area map dated July 27, 1999.
- Copy of approved amendment to our conditional use permit from Salt Lake County dated July 16, 1999.
- Copy of Salt Lake County Commissioners hearing action dated August 18, 1999 upholding amendment to our conditional use permit.
- Copy of a recent field report from Anderson Engineering Company, Inc. dated August 24, 1999.
- Copy of a recent field report from Applied Geotechnical Engineering Consultants, Inc. dated August 16, 1999.
- Copy of 1998 annual Report of mining Operations (Form MR-AR) dated September 20, 1999

I trust that this will satisfy your request for information and to maintain our Project file current with the Division of Oil, Gas and Mining.

We are providing ongoing construction, civil and geotechnical observation and inspection of the work in progress. Reports are filed on a regular basis to Salt Lake County.

We appreciate your interest and efforts. Please let me know directly if you may require any further information.

Thank you.

My Best,

Kerry B. Nielsen, A.I.A.

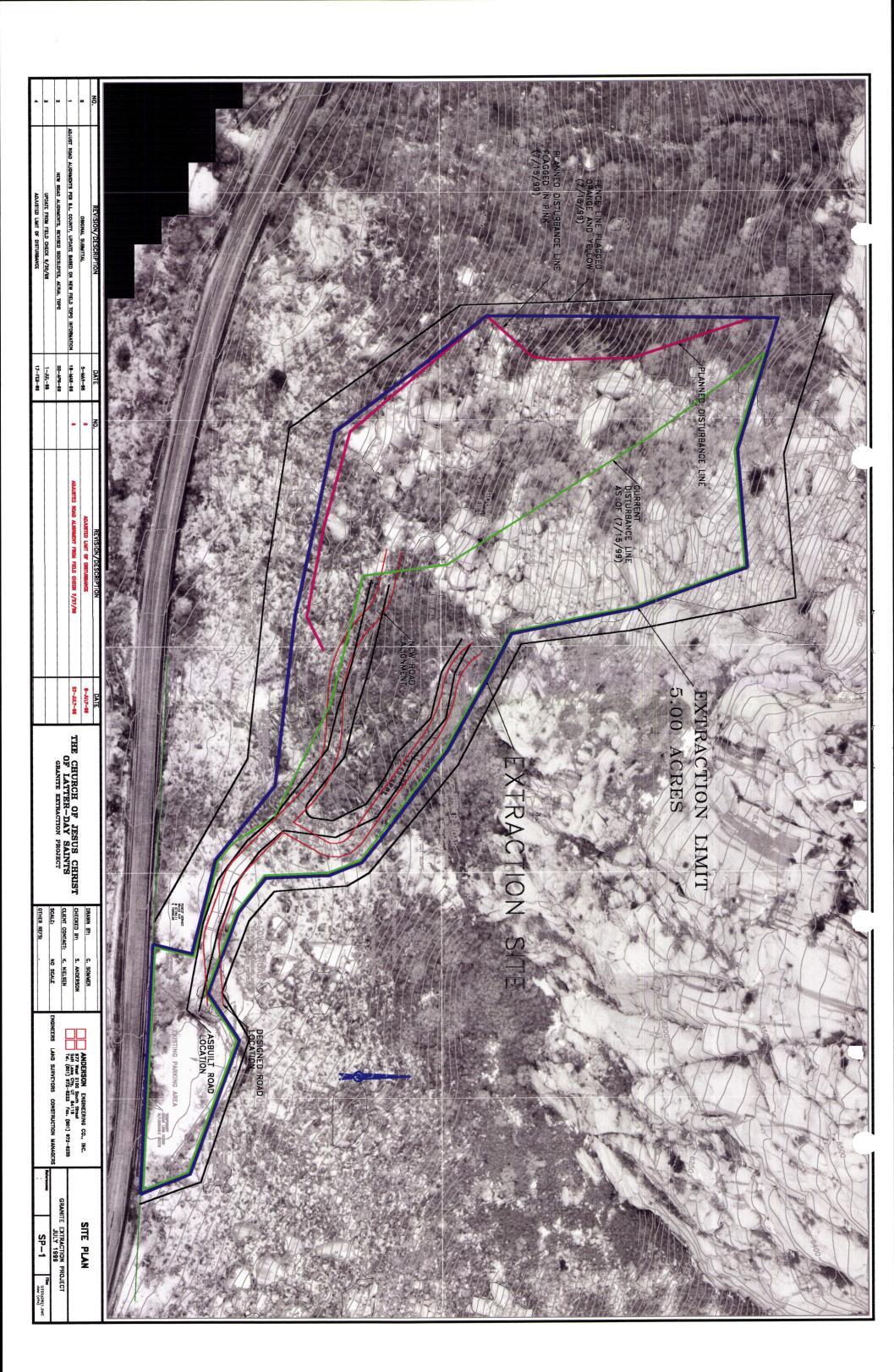
**Project Architect** 

KBN/kbn.

attachments: as listed above

c: Tom Hanson, LDS
Steve Anderson, Anderson Engineering
Jim Peterson, Legacy
Marc Mascaro, Kirton & McConkie
File A-1

dogmwh001.wpd S-035-017





# Salt Lake County Public Works Department Development Services Division

Mary Callaghan, Commissioner
J. D. Johnson, Department Director
Carl R. Eriksson, P.E., Division Director

July 16, 1999

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JUL 20 1999

TEMPLES & SPECIAL PROJECTS
DIVISION

Kerry B. Nielsen
The Church of Jesus Christ of Latter-day Saints
15 E. South Temple Street
Salt Lake City, Utah 84150-5652



SALT LAKE COUNTY
GOVERNMENT CENTER
2001 S. State Street
Suite N3600
Salt Lake City
Utah 84190-4050
Tel (801) 468-2000
Fax (801) 468-2169

Re:

17912 - LDS CHURCH - 5047 E. LITTLE COTTONWOOD CANYON RD. (9800 S.) - MINERAL EXTRACTION (MODIFY 1000' REQUIREMENT) - FR-20 ZONE (FCOZ) - APPROVAL DATE: JULY 13, 1999

# THIS LETTER CONSTITUTES AN AMENDMENT TO THE CONDITIONAL USE PERMIT.

This approval allows mineral extraction to occur within the 1000' limit established by the original conditional use permit. The amended distance limit is 791' from the closest occupied residential lot.

The following is a condition required by this approval:

1. When each of the single family dwellings, at the eastern end of Wasatch Resort, that is under construction receives approval of a final inspection, the mineral extraction must be moved to maintain a 1000' distance from the lot where the single family dwelling is located that received approval of a final inspection. When the eastern most single family dwelling receives approval of a final inspection the original 1000' limit will be used to regulate the location of the mineral extraction.

All other conditions of the original conditional use permit remain in force, and must be complied with.

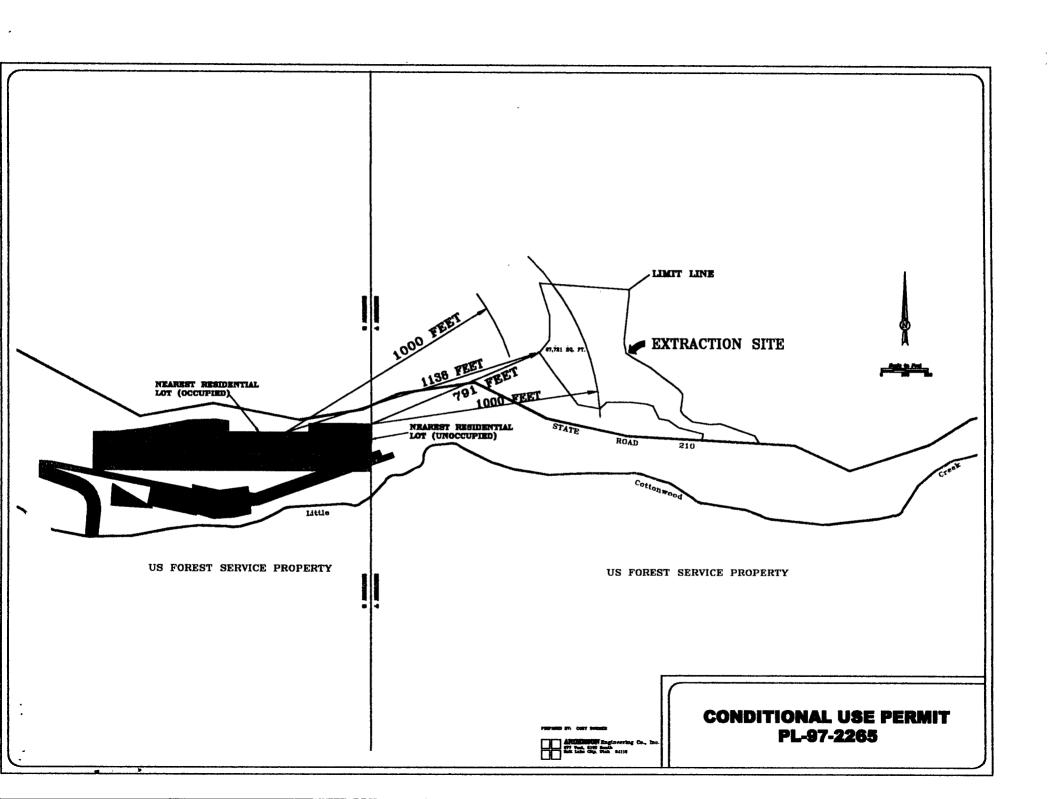
Respectfully,

CC:

William A. Marsh Associate Director

> Carl Eriksson Greg Baptist

William a. March



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AUG 24 1999

SPECIAL PROJECTS DIVISION

August 18, 1999



SALT LAKE COUNTY GOVERNMENT CENTER 2001 S. State Street Suite N2100 Salt Lake City Utah 84190-1000

Mr. William Marsh, Associate Director Development Services Division Rm. N3600, Government Center Salt Lake City, Utah

Dear Mr. Marsh:

Salt Lake County

Mark L. Shurtleff Brent Overson

Mary Callaghan, CHAIR

**Board of Commissioners** 

The Board of County Commissioners, at its meeting held this day, upheld, with one modification, the Planning Commission's conditional use approval of application #17912 submitted by the LDS Church to allow mineral extraction to occur at 5047 E. Little Cottonwood Road 791 feet from the closet occupied residential lot.

The modification is to place a moratorium suspending the mineral extraction work during the winter months when snow makes the roads dangerous.

The Board directed the staff to work with the LDS Church Architect to establish the dates of this moratorium (approximately from the beginning of the ski season to the end of the ski season).

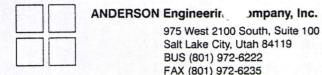
Very truly yours,

BOARD OF COUNTY COMMISSIONERS

SHERRIE SWENSEN, COUNTY CLERK

cc: Corporation of the Presiding Bishop The Church of Jesus Christ of Latter-day Saints 15 East South temple Salt Lake City, Utah 84150-5652 Kerry B. Nielsen, AlA/Thomas E. Hanson 15 East South Temple Salt Lake City, Utah 84150-5652 W. Cullen Battle, Esq. Law Firm of Fabian & Clendenin P.O. Box 510210

Salt Lake City, Utah 84110





AUG 26 1999

SPECIAL PROJECTS DIVISION

Construction Managers Reclamation Design Civil Engineers



August 24, 1999

# Kerry Nielsen

The Church of Jesus Christ of Latter-day Saints Temples and Special Projects Division 15 East South Temple - 8<sup>th</sup> floor Salt Lake City, UT 84150

Re: Little Cottonwood Canyon Inspection Report

Dear Kerry:

Anderson Engineering Co., Inc. (AECI), in accordance with our agreement, has made a periodic inspection of the Granite Extraction Site on August 19, 1999. The inspection was made at approximately 7:30 am. Weather conditions were good and not impacting operations.

#### CONDITIONS AT TIME OF INSPECTION

#### **Road Conditions**

Road alignment and conditions remained unchanged from our previous report. The lower road should be more clearly defined by placing boulders along the edge to prevent the road surface from being widened beyond the approved width. Also, a drainage ditch should be constructed along the uphill side of the road to prevent erosion of the road and sediment from migrating off the site.

At the time of inspection all areas of the project were accessible and dry. Roads were relatively smooth and did not display signs of soil erosion.

Straw bales in the existing sediment basins should be inspected by the contractor and maintained as required to prevent sediment from being released from the basins.

# Work Area Location

All work is currently being conducted within the limits of disturbance as approved by Salt Lake County. This limit is clearly marked on site with pink flagging. The orange safety fence is approximately 25-50-ft. beyond the limit of disturbance. This was done to provide an ample buffer between climbers and the extraction operation. The limit of disturbance maintains a 1,000-foot distance from the nearest occupied residence.

Extraction operations are now taking place both on the upper area and the lower area.

## Safety Barrier Fence

The safety barrier fence is in place and in satisfactory condition around the perimeter of the area.

Grants, New Mexico (505) 285-6484 AECI will continue our observations on a periodic basis. If you have any questions concerning this information please contact me at 801-972-6222.

Sincerely,

ANDERSON Engineering Co., inc.

Steven D. Anderson, P.E.

SA/ds

cc: VG. Holland - LDS Church

J. Nordquist - AGEC

D. Shipley - Legacy





August 16, 1999

The Church of Jesus Christ of Latter-Day Saints 15 East South Temple Joseph Smith Memorial Building, 8th Floor Salt Lake City, UT 84150

Attention: Kerry Nielsen

FAX 240-1335

Subject: Construction Observation - July 19, 1999 through August 7, 1999

Mineral Extraction

Little Cottonwood Canyon

Project No. 983119

#### Gentlemen:

Applied Geotechnical Engineering Consultants, Inc. is observing construction on a part-time basis for the mineral extraction project located approximately 1 to 11/2 miles up Little Cottonwood Canyon, Salt Lake County, Utah. This letter summarizes our observations from July 19, 1999 through August 7, 1999.

#### Monday, July 19, 1999

The contractor was drilling Boulder 34, the split section of Boulder 34 positioned in the upper access road, and a split section of a boulder northwest of Boulder 34.

# Tuesday, July 20, 1999

The contractor was drilling at numerous locations within the boulder field and in the upper access road.

At the time of the site visit, the contractor split, to downsize, two boulder sections positioned in the branch road northwest of Boulder 34.

# Wednesday, July 21, 1999

The contractor was drilling Boulder 34, a boulder in the embankment east of Boulder 34, and a boulder on the north embankment of the lower access road. The leading edge of the lower access road was being advanced westward. The contractor was actively clearing trees and excavating the surface grade.

LDS Church August 16, 1999 Page 2

# Thursday, July 22, 1999

The contractor was actively extending the leading edge of the lower access road. Five drill teams were drilling boulders in the woods in front of the road's leading edge.

# Friday, July 23, 1999

Since yesterday's site visit, the contractor had continued extending the lower access road. One boulder, in front of the advancing edge of the road, had been drilled and split.

# Monday, July 26, 1999

The contractor had four drill teams drilling in front of the leading edge of the lower access road and two drill teams drilling northwest of Boulder 34.

# Tuesday, July 27, 1999

The contractor had four drill teams working in front of the advancing edge of the lower access road and two drill teams north/northwest of Boulder 34. One of the latter two drill teams was working on the boulder above the steep embankment north of the branch road located northwest of Boulder 34. The second of the two drill teams was working on Boulder 37. At the time of the site visit, the contractor was excavating at the advancing edge of the lower access road.

# Wednesday, July 28, 1999

The contractor was excavating at the advancing the edge of the lower access road. Additionally, the contractor was drilling in front of the advancing edge of the road and on Boulder 37. The boulder above the steep embankment north of the branch road was being prepared for blasting.

#### Thursday, July 29, 1999

The contractor was drilling in front of the advancing edge of the lower access road, directly south of Boulder 15. Four large boulders (greater than 8' diameter) have been drilled and split in this area, and require further downsizing. The contractor was also drilling Boulder 37 and a split section of the boulder positioned above the steep embankment north of the branch road. This second boulder was split yesterday afternoon. The split section had fallen safely to the branch road.

LDS Church August 16, 1999 Page 3

Since our last site visit, the east/west drill lines of the boulder located on the eastern limit of the boulder field and north of the upper access road had been split. The split boulder sections did not fall during the event. Therefore, a new north/south line of holes was being drilled in the boulder.

# . Friday, July 30, 1999

The contractor was downsizing boulder sections and boulders positioned in front of the leading edge of the lower access road. Boulder 37 was also being drilled. Additionally, the boulder sections, positioned in the branch road of the lead road, were drilled and being prepared for splitting.

During the site visit, AGEC recommended to the contractor that he keep his workers off of the steep, temporary embankment cuts (i.e. east and west Boulder 34). These embankment cuts generally exceed 40 degrees from the horizontal. Overall, however, the slope within the construction work area is well below the angle of repose of the rock. The upper access road remains an effective "catch basin" at the bottom of the embankment cuts.

# Saturday, July 31, 1999

The contractor continued drilling in front of the leading edge of the lower access road with four drill teams. Many large boulders have been drilled and split and require further downsizing. The contractor also had two drill teams in the boulder field above Boulder 34.

# Monday, August 2, 1999

The contractor was preparing to further split the large boulder positioned at the top of the north embankment of the branch road northwest of Boulder 34. The contractor also had four drill teams working in front of the leading edge of the lower access road.

## Tuesday, August 3, 1999

The contractor continued to drill and split at the leading edge of the lower access road, as well as north/northwest of Boulder 34,

# Wednesday, August 4, 1999

The contractor was downsizing boulder sections in the branch road. Two drill teams worked north/northwest of Boulder 34 and four drill teams worked in front of the leading edge of the lower access road.

LDS Church August 16, 1999 Page 4

# Thursday, August 5, 1999

Based on a conversation with the contractor, many of the downsized boulder sections were removed from the leading edge of the lower access road and the road was advanced approximately 10 to 20 feet. Also, the contractor commenced to drill horizontal holes into the south face of Boulder 34.

# Friday, August 6, 1999

The contractor was drilling the southern face of Boulder 34, Boulder 37, and the boulder embedded in the steep embankment east of Boulder 34. This latter boulder is on the eastern limit of the boulder field immediately above the upper access road. The contractor also continues to drill in front of the leading edge of the lower access road.

# Saturday, August 7, 1999

Since yesterday's site visit, the contractor had continued drilling and splitting in front of the leading edge of the lower access road. Also, additional drilling had been completed on the southern and western faces of Boulder 34.

Figure 1 is provided to summarize the progress of drilling, splitting, and removal of boulders from the site. As can be seen in this figure and from the summary of our site visits above, work has been concentrated in the vicinity of Boulder 34 and in front (west) of the leading edge of the lower access road.

We will continue our observation on a part-time basis. If you have any questions or if we can be of further service, please call.

Sincerely,

APPLIED GEOTECHNICAL ENGINEERING CONSULTANTS, INC.

Katrina B. Grundstrom, P.E.

Katrina B. Grundstrom

Reviewed by JEN, P.E.

KBG/sc enclosure

cc: Greg Baptist (Salt Lake County, FAX 468-2169) Steve Anderson (Anderson Engineering, FAX 972-6235)

